

## ABSTRACT

To provide high-speed printing with an inexpensive arrangement, a dedicated printer control hardware circuit 5 is provided between a printer driver 1 of a host computer and a printer 9. The printer driver 1 divides an image to be printed into an illustration (a natural image), such as a photograph or a drawing, and characters/graphics. The printer driver 5 outputs full-color RGB raster data for the illustration, while performing color conversion/halftoning for the character/graphic data and outputting binary CMYK raster data.

The control circuit 5 performs color conversion/halftoning for the full-color illustration RGB raster data to convert them into binary CMYK raster data. Then, the control circuit 5 superimposes the obtained binary CMYK raster data and the binary CMYK raster data for 10 characters/graphics to form binary CMYK raster data for a complete print image, and transmits the final binary CMYK raster data to the printer 9. The control circuit 5 also rearranges or thins pixel data for interlace printing or overlap printing.